## METHOD AND SYSTEM FOR GENERATION AND HOMODYNE DETECTION

## ABSTRACT OF THE DISCLOSURE

The invention solves the problem of generation and homodyne detection. Its main application refers to generation and reception of microwave signals during instantaneous measurement of position and shift of mobile elements especially of rotor units of working turbo-machines during true-time operation. The method based on the selection of equal value of both electrical channels between shunt arm in waveguide T-connection and generation diode in one collinear arm and in the second collinear arm between the same shunt arm and detection diode. The system contains generation diode seating connected through waveguide T-connection with detection diode seating.